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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,336	02/08/2002	Kabir Siddiqui	60001.0127US01/MS190468.1	2357

7590 10/27/2003
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EXAMINER

KALAFUT, STEPHEN J

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 10/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

CLO-2

Office Action Summary

Application No.

10/071,336

Applicant(s)

SIDDIQUI ET AL.

Examiner

Stephen J. Kalafut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____

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Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "generally rectangular" would have indefinite scope. How different from a rectangle may a shape be, while still meeting this term? The casing having a "width" equal to the "thickness" of the battery cell is confusing, since the disclosed casing conforms to the shape of the cell, and thus has its own "width" and "thickness" dimensions. If the thickness of the casing is equal to the thickness of the cell, that would mean that the cell could not fit inside the casing. The casing must be slightly larger to accommodate the cell. In claim 10, the term "preferably" is unclear, since no larger class of materials is recited. Thus, whether the claim is limited only to carbonate cannot be determined.

Claims 11-13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. These claims recite different type of devices which the present battery pack may be used with, but do not further limit the characteristics of the battery pack itself. The pack is claimed *per se* in these claims and their parent claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Lamp *et al.* (US 6326543) or Solomon *et al.* (US 2003/0022060), each in view of Aksoy *et al.* (US 5,298,347).

Lamp *et al.* disclose a generally rectangular (to the extent that the term is understood) battery pack (14), which would have a length, width and thickness, and which includes a pair of latches (36) along opposite sides thereof, and integral with the casing of the battery. Solomon *et al.* disclose a generally rectangular (to the extent that the term is understood) battery pack (5) which would have a length, width and thickness, and which includes a pair of latches (6A, 6B) along opposite sides thereof, and integral with the casing of the battery. These claims differ from Lamp *et al.* and Solomon *et al.* by reciting a rectangular battery cell within the pack, and an electrical contact along the perimeter of the cell. Aksoy *et al.* disclose a rectangular battery pack (100) which includes several rectangular cells (112) therein. Because this rectangular shape allows one or more cells to be placed in the pack without wasting space, it would be obvious to use the rectangular cells disclosed by Aksoy *et al.* in the battery packs of either Lamp *et al.* or Solomon *et al.* Regarding claims 7-10, determining optimal dimensions and materials for this battery pack would be within the skill of the ordinary artisan, in order to match the dimensions of the pack to the device with which it is used, and for the mechanical protection afforded by the casing. Claims 11-13 recite only the kinds of devices with which the present pack is used, and thus do not further distinguish the pack itself. Even so, Lamp *et al.* disclose wireless telephones and computers (column 2, lines 45-49).

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Claims 2, 5 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamp *et al.* in view of Aksoy *et al.*, both above.

The references are applied as above. Lamp *et al.* also disclose a portable electronic device (10) which uses the battery pack and contains it within a generally rectangular compartment (figure 1), and outwardly pointing latch catches on the pack, which would meet with the detents (33, 35) on the interior of the device. Regarding claims 5 and 18, as seen in figure 8, the latches are slightly inward of the lateral edges of the casing.

Claims 14, 15, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamp *et al.* in view of Aksoy *et al.* as applied to claims 1 and 16 above, and further in view of Rouillard *et al.* (US 6,120,930).

The above combination does not teach the present lithium-ion and lithium-polymer types of batteries. Rouillard *et al.* teaches these two types of cells, which have some drawbacks due to heat transfer difficulties, but provide the requisite level of energy production and safety margins (column 1, lines 28-45). While the heat transfer characteristics are a problem, Rouillard *et al.* attempt to overcome this problem, thus teaching the usefulness of these types of cells. For this reason, it would be obvious to use the lithium-ion and lithium-polymer types of cells as disclosed by Rouillard *et al.* in the rectangular shape of Aksoy *et al.* in the battery pack of Lamp *et al.*

Claim 4 is would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The latch structure, with each latch having two

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ends attached to the casing in spaced apart locations is not disclosed by the prior art applied above or cited below.

The disclosure is objected to because of the following informalities: Numeral 143, on page 6, line 6 of the specification, does not appear in any drawing figure. Appropriate correction is required.

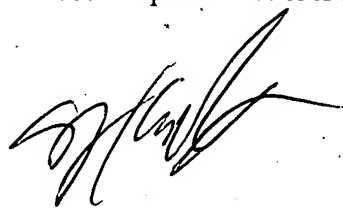
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Armani (US 5,786,106) discloses a battery pack which is slidably inserted into an electronic device. Derstine (US 5,552,240), Gerard (DE 3,904,717) and Nonaka (JP 7-25,188) disclose battery packs or battery holders which include latches.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J. Kalafut whose telephone number is 703-308-0433. The examiner can normally be reached on Mon-Fri 8:00 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan can be reached on 703-308-2383. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

sjk



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